

## WHAT IS CLAIMED IS:

1. A system for capturing an image by an optical detector, said system comprising:  
illumination system to illuminate a scan region, wherein the illumination system includes a bulb that emits light of greater intensity near its extremities than at its center; and  
5 optical reduction component to reduce image light for receipt by said optical detector.
2. The system of claim 1 wherein the diameter of the bulb near its ends is wider than the diameter of the bulb at its center.
3. The system of claim 1 wherein the diameter of the bulb increases gradually moving away from the bulb's center and wherein the diameter of the bulb increases more rapidly near the bulb's ends.
4. The system of claim 3 wherein the system is a device selected from the list of:  
scanner;  
copier; and  
fax.
5. The system of claim 1 wherein the illumination system comprises a bulb that is gradiently coated with fluorescent material.
6. The system of claim 1 wherein the illumination system comprises an incandescent bulb.

7. A method of producing a digitized image comprising the steps of:  
illuminating a scan region utilizing a bulb that emits light of greater intensity near its  
extremities than at its center;  
reducing image light received from the scan region for capture by an optical detector;  
5 and  
capturing image light with the optical detector to produce the digitized image.

8. The method of claim 7 wherein the diameter of the bulb near its ends is wider  
than the diameter of the bulb at its center.

9. The method of claim 7 wherein the diameter of the bulb increases gradually  
moving away from the bulb's center and wherein the diameter of the bulb increases more  
rapidly near the bulb's ends.

10. The method of claim 9 wherein the method is implemented by a device  
selected from the list of:

scanner;  
copier; and  
5 fax.

11. The system of claim 7 wherein the bulb is gradiently coated with fluorescent  
material.

12. The system of claim 7 wherein the bulb is an incandescent bulb.

13. A system for producing a digitized image comprising the steps of:  
means for illuminating a scan region utilizing a bulb that emits light of greater  
intensity near its extremities than at its center;  
means for reducing image light received from the scan region for capturing; and  
5 means for capturing image light to produce the digitized image.

14. The system of claim 13 wherein the diameter of the bulb near its ends is wider  
than the diameter of the bulb at its center.

15. The system of claim 13 wherein the diameter of the bulb increases gradually  
moving away from the bulb's center and wherein the diameter of the bulb increases more  
rapidly near the bulb's ends.

16. The system of claim 15 wherein the system is a device selected from the list  
of:

scanner;  
copier; and  
5 fax.

17. The system of claim 13 wherein the bulb that is gradiently coated with  
fluorescent material.

18. The system of claim 13 wherein the bulb is an incandescent bulb.

19. The system of claim 15 wherein the means for capturing is a charge-coupled  
device (CCD).

20. A bulb for providing light, said bulb comprising:  
a central portion that emits light of lesser intensity than distal portions.